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EXAMINER

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ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/617,556

Applicant(s)
Hart et al

Examiner
Greg Binda

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 17, 2000
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jul 17, 2000 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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1. In accordance with MPEP §§ 609, 707.05, and 2001.06(b), the examiner reviewed the prior art cited in the parent Application No. 08/806,266, filed on Feb. 24, 1997.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a seal assembly(s) comprising all the features recited in the claims must be shown or the features must be canceled from the claims. No new matter should be entered. The features of the following claims are not shown in the drawings:

a. Claims 10 & 21. Figs. 5-7 are the only drawings that show a seal comprising a mounting ring and a seal ring, but none of these drawings shows a “straight” outer peripheral edge (32) as recited in claims 10 & 21.

b. Claims 23 & 24. Fig. 7 is the only drawing that shows a seal assembly having a seal produced between a first surface (36) and a second surface (opposing surface on bushing 50). However, the motion of this second surface is disclosed as rotational on page 12 lines 6 & 7, not linear or oscillating as in claims 23 & 24 respectively.

Specification

3. The disclosure is objected to because the specification, at page 10, line 19 and page 11, line 3, uses the term “D10 track seal,” but provides no reference (or any other descriptive

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passage) to define the term so that it would have any useful meaning to one reading a patent issuing on this application.

4. The specification is objected to as failing to comply with 37 CFR 1.71 and 1.75(d)(1) because the detailed description fails to provide proper antecedent basis for the subject matter in claims 10, 21, 23 & 24. No invention having all the features of any of these claims is properly described in the specification.

5. The abstract of the disclosure is objected to because it includes improper language. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

(Note, when amending the abstract, applicant should be mindful that the abstract is descriptive of the claimed invention and therefore should not be identical to that of the parent application/patent.)

Claim Rejections - 35 U.S.C. § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 10, 21, 23 & 24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. No invention having all the limitations of any of these claims is shown or properly described in the specification. Thus it is not possible to accurately determine the structural implications of those limitations.

Claim Rejections - 35 U.S.C. § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

9. Claims 1, 2, 4-9, 11-13 & 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Muster, US 2,006,602. Fig. 3 shows a seal comprising: a mounting ring 18 and a seal ring 16. Seal ring 16 includes a contact surface (right side radial surface of ring 16) comprising: an inner peripheral edge (radially inner edge); a curved and raised outer peripheral edge (rightmost peak at

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the center of the contact surface); and protrusions 12 interior to the outer peripheral edge. Figs. 1 & 3 show that the protrusions 12 are equidistant, identical, and cylindrical. On page 1, col. 2, lines 11-14 and page 2, col. 1, lines 1-4, the protrusions 12 are disclosed as being of unitary construction and being formed by integrally molding elastomeric material.

10. Claims 1, 2, 5-9, 11-13, 16-20 & 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Dahll, US 5,195,757. Fig. 2 shows a seal 10 comprising: a mounting ring 18 and a seal ring 14. Figs. 1-3 show that seal ring 14 includes a contact surface 26 comprising: an inner peripheral edge 30; a curved and raised outer peripheral edge 28; and protrusions 36 (see Fig. 3) interior to the outer peripheral edge 28. Figs. 1-3 show that the protrusions 12 are equidistant, identical, of unitary construction and formed of elastomeric material (see also col. 3, line 25). Fig. 1 shows that the contact surface 26 constitutes a first surface which forms a seal with a second surface (the outer surface of shaft 12) when the second surface rotates relative to the first surface.

11. Claims 1, 6, 7, 9 & 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldswain et al, US 5,496,047. Fig. 1 shows a seal comprising: a mounting ring 13 and a seal ring 12. Fig. 2 shows that seal ring 12 includes a contact surface 33 comprising: an inner peripheral edge (radially inner edge); a curved outer peripheral edge (radially outer edge); and equidistant indentations 40, 41 interior to the outer peripheral edge. Fig. 1 shows that the contact

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surface 33 constitutes a first surface which forms a seal with a second surface 32 when the second surface rotates relative to the first surface.

12. Claims 1-3, 5-9, 11-14, 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Dietle et al, US 5,873,576. Fig. 4C shows a seal comprising: a mounting ring 103 and a elastomeric seal ring 105. Fig. 4A shows that seal ring 105 includes a contact surface 108 comprising: an inner peripheral edge 113; a curved outer peripheral edge 123 that is raised (as at 114); and equidistant, identical protrusions 200 with recesses, the protrusion 200 being interior to the outer peripheral edge 123.

13. Claims 1-3, 7 & 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Passeno, US 6,041,567. Fig. 3 shows a seal comprising: a mounting ring 24 and a seal ring 10. Fig. 4 shows that seal ring 10 includes a contact surface (upper surface) comprising: an inner peripheral edge (left side); an outer peripheral edge (right side); and protrusions 16 (see also Fig. 1) with recesses 18 interior to the outer peripheral edge. In col. 4, lines 24-32, the protrusions 16 are disclosed as being of unitary construction and being formed of elastomeric material.

Conclusion

14. The absence of a prior art rejection of claims 10, 21, 23 & 24 should not be construed as an indication of allowable subject matter but for the presence of a 112(2) rejection. Rather, such

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absence is due to the fact that the Office is constrained from making a prior art rejection where there is a great deal of confusion and uncertainty as to the proper interpretation of the limitations of a claim. (See items 2, 4 & 7 above.) *In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962).

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tronel, Asano et al, Abe et al, and Dickey et al each show a seal.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Tuesday through Friday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 306-4195, 305-3597 and 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



Greg Binda
Patent Examiner